



Zika virus testing now available through KDHE laboratory

KDHE also shares guidance for physicians and patients

Zika virus PCR and IgM testing through the KDHE laboratory

As of July 18, 2016, testing for Zika virus infection is available through the Kansas Health and Environmental Laboratories (KHEL).

KHEL will test approved patients for Zika virus using the Centers for Disease Control and Prevention (CDC) Trioplex rRT-PCR test. Serology testing (using the CDC Zika IgM MAC-ELISA) will also be conducted on approved specimens – this testing will occur either at KHEL or KHEL will arrange for testing through another state public health laboratory. Both of these tests are authorized by the federal Food and Drug Administration under Emergency Use Authorizations.

There is no cost for the testing. The turnaround time is expected to be up to 14 days.

Physicians who wish to conduct testing for Zika virus via KHEL should contact the Kansas Department of Health and Environment's epidemiology hotline (877-427-7317).

KDHE will only approve specimens from patients who meet the clinical criteria for Zika virus infection, have an epidemiologic risk factor, and are within an appropriate timeframe for specimen collection. Asymptomatic pregnant women with a risk factor will also be evaluated for testing. 2 mLs of serum will be needed to test all patients, and 2 mLs of urine may also be requested for symptomatic patients.

Zika testing conducted at commercial laboratories

The FDA has granted Emergency Use Authorizations for some commercial laboratories to conduct Zika PCR testing (see <http://www.fda.gov/MedicalDevices/Safety/EmergencySituations/ucm161496.htm#zika>). Please note that patients tested at these commercial laboratories should meet CDC's Zika virus clinical criteria (e.g., clinical signs and symptoms associated with Zika virus infection) and epidemiological criteria (e.g., history of residence in or travel to a geographic region with active Zika transmission at the time of travel, or other epidemiologic criteria for which Zika virus testing may be indicated).

Providers should collect and store a serum aliquot for subsequent Zika IgM MAC-ELISA testing at KHEL in the event the commercial PCR test is negative. Zika IgM MAC-ELISA testing may be indicated because of the decline in the level of viremia over time, and possible inaccuracy in reporting of the dates of illness onset.

For more information, please see the attached document, "KDHE commercial Zika testing information for providers".

Guidance for patients who were possibly exposed to Zika virus

KDHE has compiled the attached guidance document for patients who may have been exposed to Zika virus, "KDHE guidance for patients exposed to Zika virus". KDHE encourages providers to share this guidance with patients. CDC's guidance will evolve as more is learned about Zika virus. For the most up-to-date information, please visit <http://www.cdc.gov/zika/index.html>.

Distributed July 19, 2016



Commercial Laboratory Zika Virus Testing Information and IgM Testing Procedure

Commercial Zika Virus Testing Information

- Travelers who are symptomatic after returning from a Zika-affected area should be tested for Zika virus by real-time reverse-transcription polymerase chain reaction (rRT-PCR).
- Several PCR tests for Zika virus are now available commercially under the federal Food and Drug Administration (FDA) Emergency Use Authorizations. For additional information, visit <http://www.fda.gov/MedicalDevices/Safety/EmergencySituations/ucm161496.htm#zika>.
- However, the commercially laboratories do not offer Zika virus IgM enzyme-linked immunosorbent assay (ELISA) or confirmatory serologic testing (plaque reduction neutralization test, or PRNT).
- **Providers should store a serum aliquot for subsequent Zika virus IgM MAC-ELISA testing at the state laboratory in the event the PCR is negative.** 2 mLs of serum should be collected between 4 days and 12 weeks after symptom onset.
- For specimens that are PCR negative and a serum aliquot was not saved, another serum specimen should be collected within 12 weeks of symptom onset for Zika virus IgM MAC-ELISA testing.
- Blood should be collected and processed per routine guidelines (collected in a serum separator tube with serum aliquots transferred to new vials), and stored in a refrigerator (2-8°C) until it is known if additional IgM testing is indicated.
- **Call KDHE's Epidemiology Hotline at (877) 427-7317 if you wish to conduct Zika IgM MAC-ELISA testing.**
- **Patients who do not meet the clinical AND epidemiological (travel history or sexual exposure to an individual with suspected Zika virus infection) criteria will not qualify for IgM testing.**

Why is there a need for additional testing after a PCR negative result?

- Additional testing may be indicated because of the decline in the level of viremia over time and possible inaccuracy in reporting of the dates of illness onset. As with all diagnostic tests, a negative result does not rule out infection.

Questions regarding this guidance can be directed to the Kansas Department of Health and Environment Epidemiology Hotline (877) 427-7317.



Guidance for those who may have been exposed to Zika virus

Guidance for all travelers returning from Zika-affected areas

- Take steps to prevent mosquito bites for **three weeks, even if you do not feel sick**, to avoid the spreading of Zika to local mosquitoes. Consider the following:
 - Use insect repellent containing DEET, IR3535, picaridin or oil of lemon eucalyptus
 - Use repellents approved by EPA, and follow the directions on the label.
 - Apply sunscreen first, then repellent.
 - Insect repellent is safe for pregnant women.
 - Do not use insect repellents on infants less than 2 months old. Do not use repellent containing oil of lemon eucalyptus on children under age of 3. Do not allow young children to apply insect repellent themselves.
 - Do not apply insect repellent to a child's hands, eyes, mouth or any irritated skin or cuts.
 - Wear long sleeves and pants; dress children the same way. Wear clothing treated with permethrin (a chemical that repels insects).
 - Stay in places with air conditioning or window and door screens.
 - Use a mosquito bed-net if you cannot keep mosquitoes out of your residence. Cover cribs, strollers and baby carriers with mosquito netting.
 - Get rid of standing water that collects in and around your residence, because standing water attracts mosquitoes.

Guidance on sexual contact*

It is not known whether men or women with asymptomatic Zika virus infection can transmit the virus sexually, and it is not known how long Zika virus can be present in semen or vaginal fluid. Persons who want to reduce the risk for sexual transmission of Zika virus should abstain from sex, or correctly and consistently use condoms for vaginal, anal, and oral sex, as recommended in the current CDC guidance for up to 6 months after exposure to Zika virus.

** On Friday, July 15, the CDC reported the first documented case of sexual transmission of Zika from a woman to her sex partner. All previously reported cases of sexually transmitted Zika virus infection have been spread from men to their sex partners. Guidance on prevention of sexual transmission of Zika virus will be updated as additional information becomes available. For the most up-to-date information, see <http://www.cdc.gov/zika/transmission/sexual-transmission.html>.*

Guidance for people who have sexual contact with someone possibly exposed to Zika virus

While traveling to a Zika-affected area	Use birth control and condoms correctly	
After returning home from a Zika-affected area	Women should continue using birth control to prevent pregnancy for eight weeks after returning home.	
	Man has symptoms or positive Zika test	Use condoms correctly every time you have vaginal, anal, or oral sex for 6 months after returning home
	Man has no symptoms and no positive Zika test	Use condoms correctly every time you have vaginal, anal, or oral sex for 8 weeks after returning home

Guidance for pregnant women and their male sex partners

Pregnant woman who did not travel to a Zika-affected area	Do not travel to a Zika-affected area during your pregnancy. If it's not possible to delay travel, talk to a health care provider first, and take steps to protect yourself with traveling.
Pregnant woman who did travel to or resided in a Zika-affected area	Call your health care provider to discuss Zika testing.
Pregnant woman's sex partner has or might have Zika	Plan together to abstain from sexual activity or use condoms correctly every time you have vaginal, anal, or oral sex for the duration of the pregnancy. If you're pregnant and had condomless vaginal, anal or oral sex with a man or woman who has or might have Zika, contact your health care provider to discuss Zika testing.

Guidance for people trying to conceive

People who did not travel to a Zika-affected area	Do not travel to a Zika-affected area while trying to conceive.	
Woman has traveled to or resided in a Zika-affected area	Symptoms	Wait at least 8 weeks after symptoms started before trying to conceive
	No Symptoms	Wait at least 8 weeks after last possible Zika exposure before trying to conceive
Man has traveled to or resided in a Zika-affected area	Symptoms	Wait at least 6 months after symptoms started before trying to conceive
	No Symptoms	Wait at least 8 weeks after last possible Zika exposure before trying to conceive

Questions regarding this guidance can be directed to the Kansas Department of Health and Environment Epidemiology Hotline (877)427-7317.